

**REMARKS**

Claims 21 to 40 are pending. Claims 1-20 have been previously canceled.

Reconsideration of the application is requested.

**§103 Rejections**

-U.S. Pat. No. 4,999,168 (TenEyck) in view of U.S. Pat. No. 5,290,522 (Rogers et al.)

Claims 21-39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 4,999,168 (TenEyck) in view of U.S. Pat. No. 5,290,522 (Rogers et al.).

The rejection of claims 21-39 under 35 USC § 103(a) as being unpatentable over '168 (TenEyck) in view of '522 (Rogers et al.) is unwarranted and should be withdrawn.

Applicant claims, in claim 21, a pollution control device comprising a pollution control element arranged in a casing with a mounting mat disposed between said casing and said pollution control element, said casing having an exterior exposed to the atmosphere, said mounting mat comprising at least one intumescent layer disposed between at least one first non-intumescent layer and at least one second non-intumescent layer, with said at least one first non-intumescent layer being disposed between said at least one intumescent layer and said pollution control element, and said at least one second non-intumescent layer being disposed between said at least one intumescent layer and said casing,

wherein said at least one intumescent layer comprises an intumescent material and has a surface density of at least about  $500 \text{ g/m}^2$ , said at least one first non-intumescent layer comprises inorganic fibers, has a surface density of at least about  $450 \text{ g/m}^2$  and insulates said at least one intumescent layer from excessive heat from said pollution control element, and said at least one second non-intumescent layer comprises inorganic fibers, has a surface density of at least about  $450 \text{ g/m}^2$  and insulates said at least one intumescent layer from relatively lower temperatures of said casing.

As discussed in Applicants' previous response, the thickness of reinforcing layer 24 appears to be relatively thin (see col. 5, lines 49-64; also see col. 3, lines 64-67 of '168 (TenEyck)) as compared to thickness of the non-

intumescent layer proposed to be substituted from ‘522 (Rogers et al.). Specific thicknesses discussed in ‘168 (TenEyck) with respect to the reinforcing layer are at col. 5, lines 55-59, with the largest being “up to 7 mils” which is about 0.0178 cm. In the current Office Action, it is stated in Paragraph No. 8 that the rationale for combining ‘168 (TenEyck) in view of ‘522 (Rogers et al.) is to improve the cushioning and thermal protection properties. Further, it is said, in part, in Paragraph No. 9 that:

[the primary reference ‘168 (TenEyck)] discloses that for the reinforcing layer, “there is no criticality in the composition” and the only considerations listed are “tensile strength greater than that of the intumescent layer...and have some flexibility” (C5, L15-60). The examiner contends that such a disclosure does not prohibit the use of the non-intumescent mat of Rogers et al. The thickness parameter cited by the applicant is meant to be an example of one such possible thickness for Kraft paper or generic plastic film reinforcing layer and one having ordinary skill in the art would not assume that such a thickness would apply to the layer of Rogers et al, which is made of a more specific material having a particular improved functionality. One having ordinary skill in the art would have adjusted, through routine experimentation, the relative thicknesses of the intumescent and nonintumescent layers of the modified Ten Eyck reference (i.e. using the mat of Rogers et al.), in order to optimize the mounting strength, thermal conduction properties, cost of manufacturing and thermal holding properties.

It is submitted that while ‘168 (TenEyck) does not prohibit thickness of the reinforcing layer greater than 7 mils, it also does not teach or suggest thicknesses greater than 7 mils either. Rather, it conveys to one of ordinary skill in the art to thickness less than 7 mil (see, e.g., col. 5, lines 58-59 and col. 3, lines 64-68, bridging sentence, col. 4, lines 1-3). Hence, ‘168 (TenEyck) teaches away from thickness of the reinforcing layer greater than 7 mils. Therefore, one having ordinary skill in the art would not assume a thickness as suggested in the Office Action, nor is it clear why, given the thickness teachings of ‘168 (TenEyck), one having ordinary skill in the art would even properly look to ‘522 (Rogers et al.), let alone make the proposed modification.

Further, it is said, in part, in Paragraph No. 10 that:

The examiner also contends that adequate rationale was given in the previous office action as to motivation to use the disclosure of Rogers et al. with Ten Eyck: "Rogers et al. discloses a non-intumescent inorganic fiber mat with beneficial cushioning and thermal protection properties for use with monolith exhaust systems (Fig. 1, C2, L35-51). ... The inventions of both Ten Eyck and Rogers et al. are drawn to the field of catalytic monolith mounting mats."

Notwithstanding the proposed rationale for combining '168 (TenEyck) in view of '522 (Rogers et al.), it is submitted that given the teachings of '168 (TenEyck) and '522 (Rogers et al.) discussed above with respect to the reinforcing and non-intumescent layers (as required in Applicant's claim), one having ordinary skill in the art would not, absent the in appropriate use of hindsight analysis, particularly in view of the "teaching away" of '168 (TenEyck) with respect to thickness of the reinforcing layer, be properly motivated to combine '168 (TenEyck) and '522 (Rogers et al.) as suggested in the Office Action.

In summary, the rejection of claims 21-39 under 35 U.S.C §103(a) as being unpatentable over '168 (TenEyck) in view of '522 (Rogers et al.) is unwarranted and should be withdrawn.

- U.S. Pat. No. 4,999,168 (TenEyck) in view of U.S. Pat. No. 5,290,522 (Rogers et al.) and further in view of applicant's admission of prior art.

Claim 40 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over '168 (TenEyck) in view of '522 (Rogers et al.), and in further view of applicant's admission of prior art.

Claim 40 depends from 21. Claim 21 is patentable over '168 (TenEyck) in view of '522 (Rogers et al.) for at least the deficiency discussed above. Applicant's alleged admission of prior art fails to overcome this deficiency. Therefore, claim 40 should also be patentable.

In summary, the rejection of claim 40 under 35 U.S.C. § 103(a) as being unpatentable over '168 (TenEyck) in view of '522 (Rogers et al.), and in further view of applicant's admission of prior art is unwarranted and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance.

Examination and reconsideration of the application is requested.

Respectfully submitted,

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